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(54) Title: METHODS FOR DETECTING CALCIUM ION INFUX

(57) **Abstract:** A method for detecting influx of calcium ions into a eukaryotic cell comprising providing a eukaryotic cell having a detectable reporter capable of translocation from the cytosol to associate with the plasma membrane in response to an influx of calcium ions, and, monitoring association of the detectable report with the plasma membrane and/or a decrease in the detectable report in the cytosol. The detectable report is preferably CAPRI or a derivative thereof and is preferably labelled with a fluorescent marker.